

[0038] What is claimed is:

1. A method comprising:

allocating charging currents from a single current source to two or more separate charging ports having two or more rechargeable batteries coupled respectively thereto so that said two or more rechargeable batteries will be fully charged at substantially the same time.

2. The method of claim 1, further comprising:

determining relative amounts of charge required to fully charge said two or more rechargeable batteries.

3. The method of claim 1, further comprising:

determining a charging current allocated to a particular charging port at least in part on an average current drain during usage of the rechargeable battery coupled to said particular charging port.

4. A charger comprising:

a single current source;

two or more separate charging ports;

a current allocator to allocate charging currents from said single current source to said two or more ports; and

a controller to determine said charging currents so that two or more rechargeable batteries coupled respectively to said two or more ports will be fully charged at substantially the same time.

5. The charger of claim 4, further comprising:

a measurement unit to measure voltage differences at said two or more ports;  
and

one or more lookup tables,

wherein said controller is to determine from said one or more lookup tables an amount of charge required to fully charge a battery based on said measured voltage difference, a battery type, and an average current drain of said battery during usage.

6. The charger of claim 4, wherein a particular one of said rechargeable batteries is inside a battery-operated device and said controller is to receive a voltage of said particular rechargeable battery from said battery-operated device, the charger further comprising:

one or more lookup tables,

wherein said controller is to determine from said one or more lookup tables an amount of charge required to fully charge said particular battery based on said received voltage, a battery type, and an average current drain of said particular battery during usage.